

### REMARKS

In preparing this Reply, the undersigned noticed that the word "from" was inadvertently changed to "form" in the Reply that was filed on June 2, 2004. This change was made without any indication of an amendment. Applicant has changed it back to what it should correctly state namely, "from" without any indication of amendment, since technically that change was never requested nor entered.

The examiner rejected claims 43-52 under 35 U.S.C. 101 as being directed to non statutory subject matter.

Applicant has amended those claims to recite in a computer system, as appropriate, and submits that the claims are statutory.

The examiner rejected claims 44-63 under 35 U.S.C. 103(a) as being unpatentable over Wilson in view of Zusman et al and Kampe et al., in further view of Lange.

Claim 44, as amended, is distinct over the cited references. Claim 44 includes the features of receiving, in the computer system, a message in a receiver object from one of a plurality of feed lines, a timing object to the received message, the timing data including a time extracted from the received message and a stamp indicating a receipt time at the receiver object \*\*\* activating, in the computer system, a translator object to translate the received message into a market event object \*\*\* validating \*\*\* the market event object entry and publishing \*\*\* the validated market event object entry in a sender object to a plurality of alert engines.

The examiner contends that:

Wilson discloses market event data received by a plurality of feed lines (fig 1) which is then translated into common formats (col 2, lines 38-44; col 6, lines 61-67; col 7, lines 1-7; col 7, lines 39-55). Mechanisms (fig I ) receive the data after it has been processed by a gateway (I) which is then disseminated. A private network is disclosed (col4, lines 5-1 6).

Wilson also discloses placing time data on incoming messages as a means of accurately identifying and flagging messages for later processing (col 6, lines 45 et seq) and to provide an platform compatibility to facilitate network communications over disparate network architectures and protocols (col4, lines 1 et seq).

Wilson discloses market session data (col 5, lines 4-10), line (col 5, lines 60-67; col 6, lines 1-4), feed (col4, lines 52-59), message type (col 6, lines 52-67), and original identification (col 5, lines 26-32). Since the mechanisms to Wilson include

processors that manipulate data, there are "engines" present. Since data is disseminated there is present "publishing".

This is incorrect. Wilson discloses (Col 6, lines 61-67; Col 7, lines 1-7) receiving an order and translating the order into a plurality of formats, in contrast to what is actually recited in claim 44.

For example, if the gateway 1 receives an order from a customer system 2 containing three transactions (as shown in FIG. 3), i.e., (1) purchase 100,000 shares of XYZ stock on the NYSE at \$17/share, (2) sell 200,000 shares of ABC stock on the TSE at \$42/share, and (3) buy 1000 July put options for LMN stock at last asking price, the gateway 1 will count the number of transactions and set flags for each, i.e., three flags. The gateway 1 will also write tracking data relating to each of the three transactions into memory. The gateway 1 will then begin translating the first transaction from FIX protocol into CMS protocol, the second transaction from FIX protocol into STAMP protocol, and the third transaction from FIX protocol into the proper protocol for the relevant options exchange.

While, Wilson translates confirmation from the exchange's protocol into a common protocol, Wilson fails to disclose any mechanisms for publishing \*\*\* the validated market event object entry in a sender object to a plurality of alert engines. At Col 7, lines 39-55, Wilson teaches:

The gateway processes the transaction confirmation in steps 122, 124 and 126. In step 122 the gateway 1 translates the transaction confirmation from the exchange's protocol into a common protocol such as, for example, FIX protocol. In step 124 the gateway locates the tracking data in memory 52 relating to the relevant transaction and updates the tracking data in memory 52. In step 126 the gateway 1 transmits the transaction confirmation to the customer system 2.

In step 128 the gateway transfers the contents of memory 52 relating to transactions for which transaction confirmations have been received into storage device 54. The storage device 54 may be accessed by the customer system(s) 2, 4 and the broker system(s) 6, and by the broker. Safety features in the gateway 1 only allow a customer system/broker system access to the transactions placed by that customer system/broker system.

Wilson describes "In step 126 the gateway 1 transmits the transaction confirmation to the customer system 2. \*\*\* The storage device 54 may be accessed by the customer system(s) 2, 4 and the broker system(s) 6, and by the broker. Safety features in the gateway 1 only allow a customer system/broker system access to the transactions placed by that customer system/broker system."

That is, rather than publishing the validated market event to a plurality of alert engines, restricts access to only a customer system/broker system. In addition, Wilson, which is directed to an entirely different problem than claim 44, fails to suggest alert engines that process the market event objects to detect possible alert conditions.

The examiner admits that:

**Wilson does not disclose: attaching timing data to the received message, including time extracted from the received message, and a stamp indicating receipt time at the receiver object and other data; activating a function to translate received message into market event data; receiving in an object or activation of objects to perform recited functions - i.e. the use of object oriented language (as now claimed in claims 44, 53, and 55); a stamp indicating a receipt time at the receiver function; time comparison of messages as recited in claims 45, 54, and 56; .sequence number registration or updating; validation of market event data further including with: gap data, duplicate message discarding/tracking; and, fields within a market event object format.**

With respect to claim 44, claim 44 further recites a timing object to the received message, the timing data including a time extracted from the received message and a stamp indicating a receipt time at the receiver object. These features are not disclosed or suggested by the references.

The examiner relies on Zusman et al to disclose "a stamp indicating receipt time at the receiver object and other data." The examiner contends that "It would have been obvious to one with ordinary skill in the art to include a stamp for a receipt time to Wilson because Zusman et al teaches that a stamp is a conventional header for input messages (col9, lines 8-9)."

Applicant contends that there is no suggestion to combine the teachings of Zusman with Wilson. To motivate one of ordinary skill in the art, either the references must provide the basis for combining their teachings or there must be a cogent line of reasoning that suggests the desirability of the combination. Neither condition is present here.

Wilson deals with "a gateway for the transfer of information between financial markets and customers." As such, Wilson has no use for a stamp indicating receipt time at the receiver object, since Wilson is merely concerned with providing a gateway that can interface customers with financial markets and transmit customer orders and confirmation between customers/brokers and the financial markets.

In contrast, claim 44 requires publishing the validated market event object entry in a sender object to a plurality of alert engines that process the market event objects to detect possible alert conditions.

Assuming *arguendo*, that it is suggested to combine the teachings of Zusman and Wilson, Applicant contends that such combination still does not suggest the teachings of claim 44.

Zusman describes in col. 9 lines 1-11:

Each of these ticker stream input feeds consists of a stream of input messages each conforming to a specific predetermined input message protocol. As used herein, an input message consists of a packet of financial market data organized according to an input message protocol. For example, a single input message may include a ticker symbol identifying a particular security, a bid price, an ask price, a trade price, a trade volume, a timestamp and other header and error correction data. Input feed subsystem 50 accumulates each such input message and passes the complete input message to the message conversion subsystem 52.

Zusman teaches the inclusion of a timestamp, however claim 44 requires attaching \*\*\* timing data from a timing object to the received message, the timing data including a time extracted from the received message and a stamp indicating a receipt time at the receiver object. Zusman is silent on including a time indicating a receipt time at the receiver object. Zusman as with Wilson would have no use for such a feature.

The examiner admits that “Wilson in view of (Zusman et al and Kampe et al) does not further disclose: receiving in an object or activation objects to perform functions - i.e. the use of object oriented language.” The examiner contends that “Lange discloses the use of object-oriented language (col 90, lines 35-67). It would have been obvious to one with ordinary skill in the art to include object or activation objects to perform functions because of what is taught by Lange. Lange teaches as common for servers that receive market data to utilize object oriented techniques (Col 90, lines 42-44).”

Applicant contends that this motivation amounts to nothing more than an “obvious to try standard,” which is insufficient to support a case of prima facie obviousness. Lange does not cure any of the deficiencies of the base references and does not teach a receiver object, a timing object, a translator object to translate the received message into a market event object and a sender object.

Accordingly, claim 44 is allowable over the references.

Applicant's claims 45-52 are allowable at least for the reasons discussed in claim 44

In addition, Applicant's claim 45 adds distinct features. Claim 45 adds the feature of a message delta obtained by comparing the time extracted from the received message with times of previously received messages from the one of the plurality of feed lines.

The examiner contends that:

**It would have been obvious to one with ordinary skill in the art to include time comparisons as recited in claims 45, 54, and 56 because Zusman et al teaches correction by requesting re-submission if data included with the message is inconsistent with protocol (col 9, lines 22-34).**

There is no basis for this teaching in Zusman, since as pointed out above Zusman only discloses a timestamp. The examiner has not explained how Zusman and Wilson would use a message delta, obtained by comparing the times of the new and a previously received message from the same feed line. While in Applicant's system, an advantage is that the comparison yields an estimate of an actual event time to associate with the market event underlying the received message, no such market event to associate with the event time are disclosed in the references.

Claims 46-52 are also allowable, since the examiner has failed to supply a proper motivation to combine the teachings of the secondary references with Wilson reference. The examiner reasoning fails to show neither how Wilson benefits from the teachings of the secondary references, nor how those motivations related to applicant's respective claims.

Thus, for example, Wilson would no need for a message sequence number \*\*\* and gap data for the one of the plurality of feed lines claim 46 or validating comprises determining whether the market event object entry is valid using the message sequence number and gap data claim 47 or in which validating further comprises discarding duplicate messages (claim 48) or in which validating further comprises tracking discarded duplicate messages (claim 49).

Claim 53 directed to an apparatus is allowable generally for the reasons discussed in claims 44 and 45 by reciting a timing object for attaching timing data to the received message, the timing data including a time extracted from the received message, a stamp indicating a

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receipt time at the receiver object and timing data corresponding to the time extracted from the received message and the time from a previously received message from the same feed line, to provide an estimate of an actual event time to associate with the market event.

Enclosed is a \$1020 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: 7/25/05

  
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